```
(FILE 'HOME' ENTERED AT 13:30:30 ON 01 FEB 2001)
```

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, ... 'ENTERED AT 13:30:36 ON 01

FEB

```
2001
                SEA WNT(10W)(LIGAND OR BIND?)
                    FILE AQUASCI
                    FILE BIOSIS
               48
                   FILE BIOTECHABS
                    FILE BIOTECHDS
              40
                    FILE BIOTECHNO
                    FILE CABA
               34
                    FILE CANCERLIT
              55
                    FILE CAPLUS
              42
                    FILE DGENE
                    FILE EMBAL
               43
                    FILE EMBASE
              41
                    FILE ESBIOBASE
               9
                    FILE GENBANK
               1
                    FILE IFIPAT
              29
                    FILE LIFESCI
              43
                    FILE MEDLINE
               2
                    FILE NTIS
              12
                    FILE PASCAL
                    FILE SCISEARCH
              48
                    FILE TOXLINE
              16
                    FILE TOXLIT
                9
                    FILE USPATFULL
                    FILE WPIDS
               7 FILE WPINDEX
                QUE WNT(10W)(LIGAND OR BIND?)
L1
                SEA L1 AND SDF
                QUE L1 AND SDF
L2
                SEA WNT AND SDF
                   FILE CAPLUS
                   FILE ESBIOBASE
                   FILE SCISEARCH
                QUE WNT AND SDF
L3
     FILE 'CAPLUS, ESBIOBASE, SCISEARCH' ENTERED AT 13:36:56 ON 01 FEB 2001
              5 S WNT AND SDF
              4 DUP REM L4 (1 DUPLICATE REMOVED)
             36 S L1 AND WNT (25W) SECRET?
```

- L4
- L5
- Lб
- 18 DUP REM L6 (18 DUPLICATES REMOVED) L7

```
ANSWER 9 OF 18 SCISEARCH COPYRIGHT 2001 ISI (R)
L7
    1999:186627 SCISEARCH
AN
     The Genuine Article (R) Number: 170NW
GA
     Identification of a Frizzled-like cysteine rich domain in the
TI
     extracellular region of developmental receptor tyrosine kinases (vol 7,
pg
     1632, 1998)
     Saldanha J; Singh J (Reprint); Mahadevan D
AU
     DEPT DRUG DESIGN & EVALUAT, CAMBRIDGE CTR 12, CAMBRIDGE, MA 02142
CS
     (Reprint); NATL INST MED RES, DIV MATH BIOL, LONDON NW7 1AA, ENGLAND;
     BIOGEN INC, CAMBRIDGE CTR 14, CAMBRIDGE, MA 02142; UNIV LONDON BIRKBECK
     COLL, LONDON WC1E 7HX, ENGLAND
CYA USA; ENGLAND
     PROTEIN SCIENCE, (AUG 1998) Vol. 7, No. 8, pp. 1843-&.
SO
     Publisher: CAMBRIDGE UNIV PRESS, 40 WEST 20TH STREET, NEW YORK, NY
     10011-4211.
     ISSN: 0961-8368.
     Errata; Journal
DT
     LIFE
FS
     English
LA
REC Reference Count: 19
     *ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS*
        In Drosophila, members of the Frizzled family of tissue-polarity genes
AB
     encode proteins that appear to function as cell-surface receptors for
     Wnts. The Frizzled genes belong to the seven transmembrane class of
     receptors (7TMR) and have on their extracellular region a cysteine-rich
     domain that has been implicated as the Wnt binding
     domain. This region has a characteristic spacing of ten cysteines, which
     has also been identified in FrzB (a secreted antagonist of Wnt
     signaling) and Smoothened (another 7TMR, which is involved in the
hedgehog
     signalling pathway). We have identified, using BLAST, sequence similarity
     between the cysteine-rich domain of Frizzled and several receptor
tyrosine
     kinases. which have roles in development. These include the
     muscle-specific receptor tyrosine kinase (MuSK), the neuronal specific
     kinase (NSK2), and ROR1 and ROR2. At present, the ligands for these
     developmental tyrosine kinases are unknown. Our results suggest that
     Wnt-like ligands may bind to these developmental
     tyrosine kinases.
        . . transmembrane class of receptors (7TMR) and have on their
AB
     extracellular region a cysteine-rich domain that has been implicated as
     the Wnt binding domain. This region has a
     characteristic spacing of ten cysteines, which has also been identified
in
     FrzB (a secreted antagonist of Wnt signaling) and Smoothened
     (another 7TMR, which is involved in the hedgehog signalling pathway). We
     have identified, using. . . (NSK2), and ROR1 and ROR2. At present, the
     ligands for these developmental tyrosine kinases are unknown. Our results
     suggest that Wnt-like ligands may bind to these
     developmental tyrosine kinases.
```

- L7 ANSWER 12 OF 18 Elsevier BIOBASE COPYRIGHT 2001 Elsevier Science B.V. DUPLICATE
- AN 1998276141 ESBIOBASE
- TI sFRP-2 is a target of the Wnt-4 signaling pathway in the developing metanephric kidney
- AU Lescher B.; Haenig B.; Kispert A.
- CS A. Kispert, Max Planck-Institut Immunbiologie, Stubeweg 51, 79108 Freiburg, Germany.
 - E-mail: kispert@immunbio.mpg de
- SO Developmental Dynamics, (1998), 213/4 (440-451), 38 reference(s) CODEN: DEDYEI ISSN: 1058-8388
- DT Journal; Article
- CY United States
- LA English
- SL English
- AB Members of the Wnt family of secreted glycoproteins act as short-range signaling molecules in vertebrate embryogenesis. Previous work has shown that Wnt-4 is required for kidney development. Mice lacking functional Wnt-4 fail to form pretubular cell aggregates.
 - Wnt-4 acts as an autoinducer of the mesenchymal to epithelial transit ion underlying nephron development. We have identified a member of the gene family encoding secreted frizzled related proteins (sFRP), putative Wnt antagonists, that shows overlapping expression with Wnt-4 in aggregating mesenchyme and simple epithelial bodies during metanephric development. sFRP-2 expression is absent in metanephric mesenchyme of kidneys mutant for Wnt-4 and is coinduced with Wnt-4 in isolated metanephric mesenchyme by cells expressing Wnt-4. The cysteine-rich domain of sFRP-2 binds to Wnt-4 as shown by coimmunoprecipitation experiments. Hence, sFRP-2 is a target of the
- Wnt-4
- signaling pathway in the metanephric kidney and may modulate Wnt-4 signaling. sFRP-2 expression is highly dynamic and specific during other aspects of embryogenesis. sFRP-2 is expressed in subpopulations of ependymal cells in spinal cord and brain, in the developing eye, in limb bud mesenchyme, in the heart, and strongly in skeletogenic condensations of facial bones, suggesting widespread interaction with other members of the Wnt gene family during embryogenesis.
- AB Members of the Wnt family of secreted glycoproteins act as short-range signaling molecules in vertebrate embryogenesis. Previous work has shown that Wnt-4 is required for kidney development. Mice lacking functional Wnt-4 fail to form pretubular cell aggregates.
 - wnt-4 acts as an autoinducer of the mesenchymal to epithelial
 transit ion underlying nephron development. We have identified a member
 of the gene family encoding secreted frizzled related proteins
 (sFRP), putative Wnt antagonists, that shows overlapping expression with
 Wnt-4 in aggregating mesenchyme and simple epithelial bodies. . . in
 metanephric mesenchyme of kidneys mutant for Wnt-4 and is coinduced with
 Wnt-4 in isolated metanephric mesenchyme by cells expressing Wnt
 -4. The cysteine-rich domain of sFRP-2 binds to Wnt-4 as shown
 by coimmunoprecipitation experiments. Hence, sFRP-2 is a target of the
 Wnt-4 signaling pathway in the metanephric. . .